

GIBCO BRL

# Product Catalogue and Reference Guide

*1995-1996*



LIFE  TECHNOLOGIES™

Producer of GIBCO BRL Products

MEM (x Medium)							
Base Catalogue No.	12571	11900	12561	12000	32571	32561	41061
Component	1X Liquid mg/L	Powder mg/L	1X Liquid mg/L	Powder mg/L	1X Liquid mg/L	1X Liquid mg/L	1X Liquid mg/L
<b>INORGANIC SALTS:</b>							
CaCl <sub>2</sub> (anhyd.)	200.00	200.00	200.00	200.00	—	—	200.00
CaCl <sub>2</sub> • 2H <sub>2</sub> O	—	—	—	—	264.00	264.00	—
KCl	400.00	400.00	400.00	400.00	400.00	400.00	400.00
MgSO <sub>4</sub> (anhyd.)	97.67	97.67	97.67	97.67	—	—	97.67
MgSO <sub>4</sub> • 7H <sub>2</sub> O	—	—	—	—	200.00	200.00	—
NaCl	6800.00	6800.00	6800.00	6800.00	6800.00	6800.00	6800.00
NaHCO <sub>3</sub>	2200.00	—	2200.00	—	2200.00	2200.00	2200.00
NaH <sub>2</sub> PO <sub>4</sub> • H <sub>2</sub> O	140.00	140.00	140.00	140.00	—	—	140.00
NaH <sub>2</sub> PO <sub>4</sub> • 2H <sub>2</sub> O	—	—	—	—	158.00	158.00	—
<b>OTHER COMPONENTS:</b>							
D-Glucose	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
Lipoic Acid	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Phenol Red	10.00	10.00	10.00	10.00	10.00	10.00	—
Sodium Pyruvate	110.00	110.00	110.00	110.00	110.00	110.00	110.00
<b>AMINO ACIDS:</b>							
L-Alanine	25.00	25.00	25.00	25.00	25.00	25.00	25.00
L-Arginine • HCl	126.00	126.00	126.00	126.00	127.00	127.00	126.00
L-Asparagine • H <sub>2</sub> O	50.00	50.00	50.00	50.00	50.00	25.00	50.00
L-Aspartic Acid	30.00	30.00	30.00	30.00	30.00	30.00	30.00
L-Cystine	—	—	—	—	24.00	24.00	—
L-Cystine • 2HCl	31.00	31.00	31.00	31.00	—	—	31.00
L-Cysteine HCl	—	—	—	—	100.00	100.00	—
L-Cysteine HCl • H <sub>2</sub> O	100.00	100.00	100.00	100.00	—	—	100.00
L-Glutamic Acid	75.00	75.00	75.00	75.00	75.00	75.00	75.00
L-Glutamine	292.00	292.00	292.00	292.00	—	—	292.00
L-Alanyl-L-Glutamine	—	—	—	—	434.00	434.00	—
Glycine	50.00	50.00	50.00	50.00	50.00	50.00	50.00
L-Histidine HCl • H <sub>2</sub> O	42.00	42.00	42.00	42.00	42.00	42.00	42.00
L-Isoleucine	52.00	52.00	52.00	52.00	53.00	53.00	52.00
L-Leucine	52.00	52.00	52.00	52.00	52.00	52.00	52.00
L-Lysine • HCl	73.00	73.00	73.00	73.00	73.00	73.00	73.00
L-Methionine	15.00	15.00	15.00	15.00	15.00	15.00	15.00
L-Phenylalanine	32.00	32.00	32.00	32.00	32.00	32.00	32.00
L-Proline	40.00	40.00	40.00	40.00	40.00	40.00	40.00
L-Serine	25.00	25.00	25.00	25.00	25.00	25.00	25.00
L-Threonine	48.00	48.00	48.00	48.00	48.00	48.00	48.00
L-Tryptophan	10.00	10.00	10.00	10.00	10.00	10.00	10.00
L-Tyrosine	—	—	—	—	36.00	36.00	—
L-Tyrosine (disodium salt)	52.00	52.00	52.00	52.00	—	—	52.00
L-Valine	46.00	46.00	46.00	46.00	46.00	46.00	46.00

Nutrient Mixture Ham's F-12 <sup>1</sup>					
Base Catalogue No.	11765 1X Liquid mg/L	11059 1X Liquid mg/L	21016 1X Liquid mg/L	21700 Powder mg/L	31765 1X Liquid mg/L
<b>Component:</b>					
<b>INORGANIC SALTS:</b>					
CaCl <sub>2</sub> (anhyd.)	33.22	33.22	33.22	33.22	—
CaCl <sub>2</sub> • 2H <sub>2</sub> O	—	—	—	—	44.00
CuSO <sub>4</sub> • 5H <sub>2</sub> O	0.0024	0.0024	0.0024	0.003	0.0024
FeSO <sub>4</sub> • 7H <sub>2</sub> O	0.83	0.83	0.83	0.83	0.83
KCl	223.60	223.60	223.60	223.60	223.60
MgCl <sub>2</sub> (anhyd.)	57.22	57.22	57.22	57.22	—
MgCl <sub>2</sub> • 6H <sub>2</sub> O	—	—	—	—	122.00
NaCl	7599.00	7599.00	7599.00	7599.00	7599.00
NaHCO <sub>3</sub>	1176.00	1176.00	1176.00	—	1176.00
Na <sub>2</sub> HPO <sub>4</sub> (anhyd.)	142.00	142.00	142.00	142.00	142.00
ZnSO <sub>4</sub> • 7H <sub>2</sub> O	0.86	0.86	0.86	0.863	0.86
<b>OTHER COMPONENTS:</b>					
D-Glucose	1802.00	1802.00	1802.00	1802.00	1802.00
Hypoxanthine	—	—	—	—	4.00
Hypoxanthine • Na	4.77	4.77	4.77	4.77	—
Linoleic Acid	0.084	0.084	0.084	0.084	0.084
Lipoic Acid	0.21	0.21	0.21	0.21	0.20
Phenol Red	1.20	—	1.20	1.20	1.20
Putrescine 2HCl	0.161	0.161	0.161	0.161	0.161
Sodium Pyruvate	110.00	110.00	110.00	110.00	110.00
Thymidine	0.70	0.70	0.70	0.70	0.70
<b>AMINO ACIDS:</b>					
L-Alanine	8.90	8.90	8.90	8.90	8.90
L-Arginine • HCl	211.00	211.00	211.00	211.00	211.00
L-Asparagine • H <sub>2</sub> O	15.01	15.01	15.01	15.01	—
L-Asparagine (free base)	—	—	—	—	13.00
L-Aspartic Acid	13.30	13.30	13.30	13.30	13.30
L-Cysteine HCl	—	—	—	—	36.00
L-Cysteine HCl • H <sub>2</sub> O	35.12	35.12	35.12	35.12	—
L-Glutamic Acid	14.70	14.70	14.70	14.70	14.70
L-Glutamine	146.00	146.00	146.00	146.00	—
L-Alanyl-L-Glutamine	—	—	—	—	217.00
Glycine	7.50	7.50	7.50	7.50	7.50
L-Histidine • HCl • H <sub>2</sub> O	21.00	21.00	21.00	21.00	21.00
L-Isoleucine	4.00	4.00	4.00	4.00	4.00
L-Leucine	13.10	13.10	13.10	13.10	13.00
L-Lysine • HCl	36.50	36.50	36.50	36.50	36.50
L-Methionine	4.50	4.50	—	4.50	4.50
L-Phenylalanine	5.00	5.00	5.00	5.00	5.00
L-Proline	34.50	34.50	34.50	34.50	34.50
L-Serine	10.50	10.50	10.50	10.50	10.50
L-Threonine	11.90	11.90	11.90	11.90	12.00
L-Tryptophan	2.00	2.00	2.00	2.04	2.00
L-Tyrosine	—	—	—	—	5.40
L-Tyrosine • 2Na • 2H <sub>2</sub> O	7.81	7.81	7.81	7.81	—
L-Valine	11.70	11.70	11.70	11.70	11.70
<b>VITAMINS:</b>					
Biotin	0.0073	0.0073	0.0073	0.007	0.0073
D-Ca Pantothenate	0.50	0.50	0.50	0.48	0.50
Choline Chloride	14.00	14.00	14.00	13.96	14.00
Folic Acid	1.30	1.30	1.30	1.30	1.30
i-Inositol	18.00	18.00	18.00	18.00	18.00
Niacinamide	0.036	0.036	0.036	0.037	0.036
Pyridoxine HCl	0.06	0.06	0.06	0.062	0.06
Riboflavin	0.037	0.037	0.037	0.038	0.037
Thiamine HCl	0.30	0.30	0.30	0.34	0.30
Vitamin B <sub>12</sub>	1.40	1.40	1.40	1.36	1.40

<sup>1</sup> Ham, R. G. (1965) *Proc. Nat. Acad. Sci.*, 53, 288.

Nutrient Mixture, F-12K <sup>1</sup> (Kaighn's Modification)	
Base Catalogue No.	21127 1X Liquid mg/L
<b>Component:</b>	
<b>INORGANIC SALTS:</b>	
CaCl <sub>2</sub> (anhyd.)	102.00
KH <sub>2</sub> PO <sub>4</sub>	59.00
CuSO <sub>4</sub> • 5H <sub>2</sub> O	0.002
FeSO <sub>4</sub> • 7H <sub>2</sub> O	0.80
KCl	285.00
MgCl <sub>2</sub> (anhyd.)	49.70
MgSO <sub>4</sub>	192.00
NaCl	7530.00
NaHCO <sub>3</sub>	2500.00
Na <sub>2</sub> HPO <sub>4</sub> (anhyd.)	115.50
ZnSO <sub>4</sub> • 7H <sub>2</sub> O	0.144
<b>OTHER COMPONENTS:</b>	
D-Glucose	1260.00
Hypoxanthine • Na	4.00
Lipoic Acid	0.21
Phenol Red	3.00
Putrescine 2HCl	0.32
Sodium Pyruvate	220.00
Thymidine	0.70
<b>AMINO ACIDS:</b>	
L-Alanine	18.00
L-Arginine • HCl	422.00
L-Asparagine • H <sub>2</sub> O	30.00
L-Aspartic Acid	26.60
L-Cysteine HCl • H <sub>2</sub> O	70.00
L-Glutamic Acid	29.00
L-Glutamine	292.00
Glycine	15.00
L-Histidine • HCl • H <sub>2</sub> O	45.80
L-Isoleucine	7.88
L-Leucine	26.20
L-Lysine • HCl	73.00
L-Methionine	8.96
L-Phenylalanine	9.92
L-Proline	69.00
L-Serine	21.00
L-Threonine	23.00
L-Tryptophan	4.10
L-Tyrosine • 2Na • 2H <sub>2</sub> O	13.50
L-Valine	23.00
<b>VITAMINS:</b>	
Biotin	0.07
D-Ca Pantothenate	0.50
Choline Chloride	14.00
Folic Acid	1.30
i-Inositol	18.00
Niacinamide	0.037
Pyridoxine HCl	0.06
Riboflavin	0.04
Thiamine HCl	0.30
Vitamin B <sub>12</sub>	1.40

<sup>1</sup> Kaighn, M.E., *Tissue Culture Methods and Applications*, (1973), Kruse, P.F., and Patterson Jr., M.D., ed., p. 54-58.